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- 17. (New) A diagnostic test kit according to claim 15, wherein the means comprises the necessary elements for Southern blotting.
- 18. (New) A diagnostic test kit according to claim 16, wherein the probe comprises a sequence complementary to sequences on both sides of the deletion in the BRCA1 gene.
- 19. (New) A diagnostic test kit according to claim 17, wherein the necessary elements for Southern blotting comprises a probe, the probe comprising a sequence complementary to sequences on both sides of the deletion in the BRCA1 gene.
- 20. (New) A diagnostic test kit according to claim 15, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
- 21. (New) A diagnostic test kit according to claim 16, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
- 22. (New) A diagnostic test kit according to claim 17, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
- 23. (New) A diagnostic test kit according to claim 18, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
- 24. (New) A diagnostic test kit according to claim 19, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
- 25. (New) A diagnostic test kit according to claim 15, wherein the deletion comprises a frame shift and/or a termination codon.
- 26. (New) A diagnostic test kit according to claim 16, wherein the deletion comprises a frame shift and/or a termination codon.

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- 27. (New) A diagnostic test kit according to claim 17, wherein the deletion comprises a frame shift and/or a termination codon.
- 28. (New) A diagnostic test kit according to claim 18, wherein the deletion comprises a frame shift and/or a termination codon.
- 29. (New) A diagnostic test ket according to claim 19, wherein the deletion comprises a frame shift and/or a termination codon.
- 30. (New) A diagnostic test kit according to claim 20, wherein the deletion comprises a frame shift and/or a termination codon.
- 31. (New) A diagnostic test kit according to claim 15, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
- 32. (New) A diagnostic test kit according to claim 16, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
- 33. (New) A diagnostic test kit according to claim 17, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
- 34. (New) A diagnostic test kit according to claim 18, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
- 35. (New) A diagnostic test kit according to claim 19, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
- 36. (New) A diagnostic test kit according to claim 20, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
- 37. (New) A diagnostic test kit according to claim 25, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.

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- New) A probe for use in a diagnostic test kit for detecting the presence of or predisposition for breast cancer, wherein a means is provided for detecting a deletion of a stretch of nucleotides from a BRCA1 gene in a sample, and wherein the deletion comprises at least a major part of any one or all of exons 13, 14, 15, and 16, or at least a major part of exon 22; said probe comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
- 39. (New) A probe for use in a diagnostic test kit according to claim 38, wherein the means comprises at least one probe for hybridization, the probe comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
- 40. (New) A probe for use in a diagnostic test kit according to claim 38, wherein the means comprises the necessary elements for Southern blotting, comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
- 41. (New) A probe for use in a diagnostic test-kit according to claim 18, comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
- 42. (New) A probe for use in a diagnostic test kit according to claim 19 comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
- 43. (New) A probe for use in a diagnostic test kit according to claim 20 comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
- 44. (New) A probe for use in a diagnostic test kit according to claim 25 comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
- 45. (New) A probe for use in a diagnostic test kit according to claim 31 comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.

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- 46. (New) A probe for use in a diagnostic test kit according to claim 15, wherein the deletion comprises at least a major part of any one or all of exons 13, 14, 15, and 16, or at least a major part of exon 22 comprises, and wherein the probe is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
- 47. (New) A probe for use in a diagnostic test kit according to claim 16, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
- 48. (New) A probe for use in a diagnostic test kit according to claim 17, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
- 49. (New) A probe for use in a diagnostic test kit according to claim 18, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
- 50. (New) A probe for use in a diagnostic test kit according to claim 19, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
- 51. (New) A probe for use in a diagnostic test kit according to claim 20, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
- 52. (New) A probe for use in a diagnostic test kit according to claim 25, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
- 53. (New) A probe for use in a diagnostic test kit according to claim 31, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
- 54. (New) A probe for use in a diagnostic test kit according to claim 38, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.

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C2 C0)4 from a BRCA1 gene having a deletion of a stretch of nucleotides, comprising contacting said sample with at least one probe which alone or together with a second means for detecting said deletion of a stretch of nucleotides from a BRCA1 gene, distinguishes between BRCA1 genes having said deletion and BRCA1 genes not having said deletion, allowing hybridization between said probe and said nucleic acids to form a hybridization product and identifying the hybridization product, wherein said deletion comprises at least a major part of any one or all of exons 13, 14, 15, and 16, or at least a major part of exon 22.